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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,912	01/16/2004	Elida Isabel de Obaldia	12411.0030;TI-35769	1519
23494	7590	11/25/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED			BARAN, MARY C	
P O BOX 655474, M/S 3999			ART UNIT	
DALLAS, TX 75265			PAPER NUMBER	
			2857	

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/759,912

Applicant(s)

DE OBALDIA ET AL.

Examiner

Mary Kate B. Baran

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-13, 16, 19-26, 29-31 and 34-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6-13, 16, 19, 21-26, 29-31, 34 and 36-43 is/are rejected.
- 7) ☒ Claim(s) 5, 20 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is responsive to the Amendments filed 19 September 2005. Claims 1, 4-13, 16, 19-26, 29-31 and 34-43 are pending. Claims 1, 16 and 29 are amended. Claims 2, 3, 14, 15, 27, 28, 32, 33, 44 and 45 are cancelled.

2. The amendments filed 19 September 2005 are sufficient to overcome the prior objections to the claims, abstract and specification and the prior 35 U.S.C. 112 second paragraph rejections and the prior 35 U.S.C. 101 rejections.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 6, 7, 10-13, 16, 19, 21, 24-26, 29-31, 34, 36-38 and 41-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Limberg (U.S. Patent No. 3,798,376).

Referring to claims 1, 16 and 29, Limberg teaches an apparatus for testing a power amplifier (see Limberg, column 22 lines 38-47) and oscillator frequency in an integrated circuit based transmitter (see Limberg, column 3 lines 6-11), comprising: a comparator having a first input and a second input, wherein a power amplifier output

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signal is connected to said first input and a threshold signal is connected to said second input, said comparator operative to produce a square wave signal, wherein said threshold being adjusted such that said square wave signal is generated only when said power amplifier output voltage amplitude is about a predetermined level (see Limberg, column 8 lines 20-30); and a frequency adapted to receive the square wave signal output of said comparator and adapted to divide the frequency of said square wave to within a frequency range sufficiently below that of said oscillator frequency (see Limberg, column 6 lines 6-32), and wherein a frequency count of zero or significantly below an expected level indicates a failure of said power amplifier to generate an acceptable output power level (see Limberg, column 7 line 50 – column 8 line 19).

Referring to claims 4, 19 and 34, Limberg teaches that said threshold is dynamically configurable (see Limberg, column 30 lines 7-13).

Referring to claims 6, 21, 36 and 37, Limberg teaches that said step of dividing comprises the step of dividing said square wave to a sufficiently low frequency to permit frequency counting using relatively low cost external test equipment (see Limberg, column 6 lines 6-32).

Referring to claims 7 and 38, Limberg teaches that said step of dividing comprises the step of dividing said square wave to sufficiently low frequency thereby

permitting frequency counting using existing on-chip processing means adapted to perform frequency counting (see Limberg, column 11 lines 22-36).

Referring to claims 10, 24 and 41, Limberg teaches applying said test output signal to a relatively low cost external frequency counter to verify compliance with a desired oscillator frequency (see Limberg, column 11 lines 22-36).

Referring to claim 11, Limberg teaches the step of applying said test output signal to an on-chip software/hardware based block adapted to verify compliance with a desired oscillator frequency range by means of frequency counting (see Limberg, column 11 lines 22-36).

Referring to claims 12, 25 and 42, Limberg teaches that said oscillator frequency signal comprises carrier signal only (see Limberg, column 5 line 65 – column 6 line 1).

Referring to claims 13, 26 and 43, Limberg teaches that said oscillator frequency signal comprises carrier signal combined with a modulating signal (see Limberg, column 23 lines 48-66).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 22 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Limberg (U.S. Patent No. 3,798, 376) in view of Azar (U.S. Patent No. 6,450,184).

Referring to claims 8, 22 and 39, Limberg teaches all the features of the claimed invention except for dividing said square wave by 128 to yield approximately a 19 MHz test output signal.

Azar teaches dividing said square wave by 128 to yield approximately a 19 MHz test output signal (see Azar, column 4 lines 23-27).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Limberg to include the teachings of Azar because dividing the square wave by a multiple of two would have allowed the skilled artisan to display the frequency of the vibrations (see Azar, column 4 lines 32-35).

5. Claims 9, 23 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Limberg (U.S. Patent No. 3,798, 376) in view of Genest (U.S. Patent No. 6,066,990).

Referring to claims 9, 23 and 40, Limberg teaches all the features of the claimed invention except that the division ratio for said square wave is divided is dynamically configurable.

Genest teaches that the division ratio for said square wave is divided is dynamically configurable (see Genest, Abstract).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Limberg to include the teachings of Genest because having a dynamically configurable division ratio would have allowed the skilled artisan to test all channels (see Genest, column 6 lines 5-7).

Allowable Subject Matter

6. Claims 5, 20 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is an examiner's statement of reasons for allowance:

Claims 5, 20 and 35 would be allowable over the prior art if written in independent form because wherein said predetermined level is set to screen said transmitter for compliance with a minimum power output level by said power amplifier is not found, taught or suggested in the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

8. Applicant's arguments filed 19 September 2005 have been fully considered but they are not persuasive.

Applicant argues that Limberg does not teach "a frequency count of zero or significantly below an expected level indicates a failure of said power amplifier to generate an acceptable output power level." However, Applicant's arguments are not well taken. Limberg teaches checking an amplified signal (see Limberg, column 7 lines 41-49) for a prolonged absence of a pilot signal and if this signal is missing (i.e. zero) or too poor for satisfactory reproduction (i.e. significantly below), for an extended period of time, the detection circuits are disabled (see Limberg, column 7 line 50 – column 8 line 19).

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

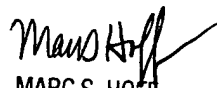
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Kate B. Baran whose telephone number is (571) 272-2211. The examiner can normally be reached on Monday - Friday from 9:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

15 November 2005


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800